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Trait and State Authenticity Across Cultures

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Abstract

We examined the role of culture in both trait and state authenticity, asking whether the search for and experience of the 'true self' is a uniquely Western phenomenon or is relevant cross-culturally. We tested participants from the US, China, India, and Singapore. US participants reported higher average levels of trait authenticity than those from Eastern cultures (i.e., China, India, Singapore), but this effect was partially explained by cultural differences in self-construal and thinking style. Importantly, the experience of state authenticity, and especially state inauthenticity, was more similar than different across cultures. In all, people from different cultures do experience authenticity, even if they do not endorse the (Western) value of "independence." The findings contribute to a more nuanced understanding of state authenticity.

Keywords: Authenticity, inauthenticity, culture, self-construal, thinking style

Trait and State Authenticity Across Cultures

Although the bulk of the literature regards authenticity as a stable attribute (i.e., trait; Goldman & Kernis, 2002; Wood, Linley, Maltby, Baliousis, & Joseph, 2008), recent work has begun to examine its situational determinants (i.e., state authenticity; Fleeson & Wilt, 2010; Lenton, Bruder, Slabu, & Sedikides, 2013). No matter how it is conceptualized, however, most investigations of authenticity have been conducted in Western cultures (e.g., UK, US). It is possible that the benefits associated with authenticity – such as higher self-esteem, higher positive affect, and lower negative affect (Goldman & Kernis, 2002), as well as lower stress (Wood et al., 2008) – are restricted to cultures valuing individualism (Robinson, Lopez, Ramos, & Nartova-Bochaver, 2012).

In general, Western cultures conceptualize the self as residing within the person, whereas Eastern cultures as embedded in interpersonal relationships (Markus & Kitayama, 1991). Definitions of authenticity – the sense of being one's true self – are more aligned with Western views of the self (e.g., independence), suggesting that the experience of authenticity may be a by-product of Western ideals. Alternatively, socio-cultural norms are often introjected (Wood, Christensen, Hebl, & Rothgerber, 1997), as people feel authentic when behaving in a normative manner (Sherman, Nave, & Funder, 2012). Thus, authenticity may be a universal phenomenon that is contingent on cultural norms. For example, East-Asians (e.g., Chinese, Japanese), compared to Westerners (e.g., Americans, British), perceive personality as malleable rather than fixed (Chiu, Hong, & Dweck, 1997); hence, the former may feel more authentic when adapting to and the latter when resisting social pressures. That is, persons from both cultures may experience authenticity and reap its attendant benefits, but under different circumstances.

We conducted a cross-cultural investigation of trait and state authenticity to assess whether the prevailing Western view of authenticity helps or hinders understanding of this construct. People are strongly motivated to attain authenticity and avoid inauthenticity (Lenton, Bruder, et al., 2013); further, some therapeutic traditions aim to help people achieve authenticity (e.g., humanistic tradition; Corey, 2009). As such, it is important that researchers

not only identify factors central to the attainment of authenticity, but also recognize that these factors may depend on culture.

Culture and Cognition

Those in the West (and other individualistic cultures) possess a relatively *independent* view of the self, emphasizing stability, uniqueness, and self-sufficiency. Those in the East (and other collectivistic cultures) possess a relatively *interdependent* view of the self, prioritizing harmonious relationships, social duties, and group achievement (Triandis, 1995). Stated differently, Western societies encourage members to develop a self that is distinct from others, whereas Eastern societies encourage the development of a self that is connected with others (Cai, Sedikides, & Jiang, 2013; Markus & Kitayama, 1991). Cultural differences in independence and interdependence are also associated with divergent cognitive processes, such that an *analytic* cognitive style is more prevalent in Western culture, whereas a *holistic* thinking style is more prevalent in Eastern culture (Nisbett, 2003; Nisbett, Peng, Choi, & Norenzayan, 2001). Analytic cognition is characterized by processing a focal object and its features independently from the surrounding context, rule-based categorization of objects, dispositional bias in causal attribution, and use of formal logic in reasoning. Conversely, holistic cognition is characterized by relational and contextual information processing, thematic and family-resemblance-based object categorization, emphasis on situational attributions, and dialecticism (Nisbett et al., 2001). Below, we outline how these cultural variables may moderate trait and state authenticity.

Culture and Trait Authenticity

The trait view has identified a set of criteria indicative of authenticity. For example, the Authentic Personality model (Wood et al., 2008) posits that authenticity incorporates three hierarchically-related facets: (a) acting in alignment with one's personal goals, preferences, and beliefs (*authentic living*); (b) the subjective feeling of knowing oneself (low *self-alienation*); and (c) not conforming to others' expectations (low *acceptance of external influence*). Similarly, the Authenticity Inventory (Kernis & Goldman, 2006) maintains that people are authentic, if they: (a) are *aware* of their intimate feelings, strengths, and weaknesses; (b) engage in *unbiased processing* of their flattering and unflattering self-

aspects; (c) *behave* in line with their own values, preferences, and needs; and (d) nurture genuine and open *relationships* with others.

Many of these criteria bear close resemblance to the independence construct. For example, behaving in accord with one's personal feelings and beliefs, knowing oneself as a unique person, and displaying these self-aspects to others, as well as resisting others' influence, are all attributes more likely to be found in the independent (vs. interdependent) self (Markus & Kitayama, 1991; Singelis, 1994). On this basis, measures assessing these attributes may be likely to show that Westerners are more authentic, on average, than Easterners.

Very little research has addressed trait authenticity outside the West. Nevertheless, the scarce studies conducted in Japan indicate that, as in Western cultures, individual differences in authenticity are a key predictor of well-being (Ito & Kodama, 2007, 2008), thus pointing to an underlying similarity in the utility of independence across cultures. More recently, Robinson et al. (2012) reported the results of a study that directly compared trait authenticity across three cultures: UK, US, and Russia. The UK and US samples self-reported higher trait authenticity than the Russian sample (their only non-Western sample). Robinson and colleagues (2012) used the World Value Survey data (Hofstede, Hofstede, & Minkov, 2010) to assign each country scores for independent versus interdependent self-construal. However, given that these authors did not directly measure self-construal, they could neither confirm the relative standing of their samples on independence-interdependence nor test whether differences in self-construal mediated culture's effect on trait authenticity. This study also did not assess (neither did it intend to do so) the degree to which thinking style (i.e., analysis-holism) accounts for the observed cross-cultural differences.

Undermining the implication that members of Eastern cultures are more inauthentic than members of Western cultures, other research (English & Chen, 2011) found that role consistency relates to a sense of authenticity across cultures; it is just that "role-consistency" is defined differently across cultures. In that study, inauthenticity resulted from inconsistency *across relationship context* and *within relationship context over time* for European Americans. For East-Asian Americans, however, inauthenticity resulted solely from self-

concept inconsistency *within relationship context over time*. Thus, there is reason to believe that self-reported trait authenticity may not differ across cultures, but only so long as its operationalization allows for those who value consistency within relationships over time to be deemed authentic as well.

Clearly, additional research is needed, testing if and how cultures vary in trait authenticity. Such research would assess more than one Eastern culture and would measure directly cultural differences in independence/interdependence and analysis-holism. Doing so would allow for a broader and more precise examination of the cross-cultural underpinnings of trait authenticity.

Culture and State Authenticity

As mentioned above, researchers have also begun to approach authenticity from a state perspective (Fleeson & Wilt, 2010; Heppner et al., 2008; Lenton, Bruder, et al., 2013; Lenton, Slabu, Sedikides, & Power, 2013). Whereas a trait is a person's base-rate propensity toward (or away from) a given cognition or emotion, a state is the actual cognition or emotion in a particular situation (Endler, Parker, Bagby, & Cox, 1991). Stated otherwise, "if a person is in a state he or she must be able to feel it" (Fridhandler, 1986, p. 170). Accordingly, state authenticity is best understood as a phenomenological experience, which may manifest itself as psychological tension when undermined (Harter, 2002, p. 383). As with the trait authenticity literature, however, nearly all of the studies to date have been conducted with Western participants.

Affect

Such studies suggest that, among Westerners, the experience of authenticity is strongly correlated with affect (Heppner et al., 2008; Lenton, Bruder, et al., 2013; Rice & Pasupathi, 2010). For example, Rice and Pasupathi (2010), who analyzed participants' narratives using a text analysis program (Linguistic Inquiry and Word Count or LIWC; Pennebaker, Booth, & Francis, 2007), reported that self-consistent events contained more positive than negative affect (for older adults), whereas self-discrepant events contained more negative than positive affect. Furthermore, our own prior research (Lenton, Bruder, et al., 2013) showed that discrete emotions such as contentment, relaxation, and enthusiasm were related to

authenticity, whereas emotions such as anxiety, sadness, and disappointment were related to inauthenticity.

Western cultures are likely to exert pressure, however, to display positive emotions and attain happiness in order to avoid being seen as a failure (Matsumoto, 1991; Safdar, Hassan, Qureshi, & Akbar, 2009). In contrast, Eastern cultures are more likely to encourage a balance between positive and negative emotions (Bagozzi, Wong, & Yi, 1999; Miyamoto & Riff, 2011). Thus, the affective differences between experiences of authenticity and inauthenticity identified in Western cultures may be weaker in the East.

Need Satisfaction

Authenticity is also thought to result from the satisfaction of certain psychological needs. Self-determination theory (SDT; Deci & Ryan, 2000; Ryan & Deci, 2000) proposes that satisfaction of the needs for autonomy (i.e., freedom to do what is personally important), competence (i.e., feeling able to master challenges), and relatedness (i.e., feeling close to and accepted by others) facilitates authenticity. Sociometer theory similarly posits that people feel authentic when they are accepted by others, so long as their precipitating behavior was natural (Leary, 2003). Acceptance versus rejection by others also has strong implications for self-esteem (Leary & Baumeister, 2000). According to sociometer theory, then, satisfaction of both relatedness and self-esteem needs should correlate with authenticity.

Very little research has examined the relation between authenticity and need satisfaction. A diary study conducted in the US (Heppner et al., 2008) found that daily variations in satisfaction of autonomy, relatedness, and competence needs correlated positively with felt authenticity. Our prior research (Lenton, Bruder, et al., 2013), also conducted with Westerners, showed that authentic experiences were more likely to satisfy the needs for self-esteem, autonomy, relatedness, and competence—as well as pleasure, meaning, physical thriving, popularity, and security—than inauthentic experiences. Given that SDT needs and self-esteem are universally important for well-being (Church et al., 2012; Sedikides & Gregg, 2003, 2008), that the satisfaction of many additional needs correlates with authenticity, and that these various psychological needs are not independent of one another (Heppner et al., 2008; Lenton, Slabu, & Sedikides, 2014), we hypothesize that

authenticity (vs. inauthenticity) will be associated with satisfaction of psychological needs across both Western and Eastern cultures.

Self-Esteem

In addition to being a source of motivation (a need; Sedikides & Alicke, 2012), self-esteem can also be a state (Crocker & Park, 2004). That is, individuals possess a valenced view of their self-concept in a situation, irrespective of whether they possess a current need for self-esteem. Our previous research (Lenton, Bruder, et al., 2013) indicates that Westerners associate authenticity (vs. inauthenticity) with having significantly higher state self-esteem. Self-esteem is also a cultural universal. For example, in their study of 53 nations, Schmitt and Allik (2005) found that mean global self-esteem ratings were above the scale midpoint for all nations. At the same time, however, they observed both between- and within-culture differences in self-esteem. Regardless, self-esteem is valued and attained in all cultures (Hepper, Sedikides, & Cai, 2013; Yamaguchi et al., 2007), although the route to self-esteem attainment may vary (Chiu, Wan, Cheng, Kim, & Yang, 2011; Sedikides & Gregg, 2008). On the basis of such findings, we expect that authenticity will play a role in facilitating positive self-evaluations across cultures. Given that the hallmark of authentic experiences is a positive feeling (Heppner et al., 2008; Lenton, Bruder, et al., 2013), we anticipate that both Westerners and Easterners will rate authentic (vs. inauthentic) experiences as entailing higher self-esteem.

Self-Consciousness

Inauthentic experiences occur in situations where public self-consciousness is high (Harter, 2002; Lenton, Bruder et al., 2013). Also, Easterners have a chronic tendency to view themselves from the perspective of others (Heine, Takemoto, Moskaleiko, Lasaleta, & Henrich, 2008). Therefore, the public self-consciousness difference between authenticity and inauthenticity found in Western cultures may be weaker in Eastern cultures; that is, for Easterners, public self-consciousness may not impede the experience of authenticity.

Some authors have proposed that authenticity is associated with low private self-awareness (Turner & Billings, 1991; but see Lenton, Bruder et al., 2013). As described above, Easterners (vs. Westerners) are more likely to attend to the perspective of others, and

consequently they are more aware of their personal standards and shortcomings (Heine et al., 2008). This heightened state of private self-awareness facilitates integration into their group. Similar to the prediction concerning public self-consciousness, we hypothesize that variations in private self-consciousness will have lesser implications for Easterners' (vs. Westerners') authenticity, due to their stronger habitual self-focus.

Ideal Self

Western participants' true self overlaps with their ideal self (Lenton, Bruder, et al., 2013). This may be because Westerners idealize being true to themselves (Knobe, 2005); thus, being 'real' may make them feel 'ideal.' Indeed, Westerners feel more authentic when behaving in what they perceive to be a 'well-adjusted' (i.e., ideal) manner (Sherman et al., 2012). Also, Easterners report larger actual-ideal discrepancies than Westerners, although these discrepancies are less debilitating for Easterners, given that they dwell more on their shortcomings. Westerners, on the other hand, feel more threatened when viewing themselves as distant from who they want to be (Kitayama, Takagi, & Matsumoto, 1995). To the extent that being authentic is more a Western than an Eastern ideal and, further, Easterners are able to live more comfortably with their actual-ideal discrepancies, we hypothesize that the real self will overlap with the ideal self more among Westerners than Easterners.

Overview

We assessed the trait authenticity, self-construal (independence-interdependence), and thinking style (analysis-holism) of participants from China, India, Singapore, and the US. We used a trait authenticity measure that takes a Western view, given that it conceives of the authentic person as one who lives by her/his unique standards and rejects others' influence (Wood et al., 2008). To assess state authenticity, we asked participants to describe a time when they felt authentic (or 'most me'), inauthentic (or 'least me'), or to describe what they did 'yesterday.' They rated this experience with respect to positive and negative affect, need satisfaction, state self-esteem, public and private self-consciousness, and overlap with the ideal self.

Our hypotheses were as follows:

(1) Western societies, more so than Eastern societies, encourage an independent view of the self (i.e., a quest for knowing and accepting who one is regardless of others' expectations) and analytic thinking (perceiving objects and actors as standing apart from their context). These norms resonate with extant models of trait authenticity. Accordingly, Westerners, compared to Easterners, will self-report higher levels of authenticity, due to cultural differences in self-construal and analysis-holism.

(2) Given that socio-cultural norms are introjected (Wood et al., 1997), behaving in accordance with one's norms may trigger authenticity, irrespective of what these norms are (independence vs. interdependence). Accordingly, participants from the East and the West will show notable similarity and predictable dissimilarity with respect to state authenticity versus state inauthenticity. In particular:

(2a) Both Western and Eastern cultures will associate authenticity (as opposed to inauthenticity) with higher need satisfaction and general self-esteem;

(2b) If cultural differences in the experience of state authenticity arise, these will be in the arenas of positive and negative affect (such that Westerners will perceive a larger affective difference between authenticity and inauthenticity), public and private self-consciousness (such that Westerners will perceive authenticity and inauthenticity to be more discriminable on these two constructs), or ideal-self overlap (such that there will be a stronger association between the ideal and real self for Westerners than for Easterners). Stated otherwise, though the ordering of the means (most me vs. least me vs. yesterday) is likely to be similar across cultures, the degree of differentiation between authentic and inauthentic experiences for these constructs (i.e., positive and negative affect, public and private self-consciousness, ideal-self overlap) will be greater for Westerners than for Easterners.

We did not formulate specific hypotheses as to how the three Eastern cultures would differ from one another. However, we did not expect these cultures to be manifestly identical on authenticity or inauthenticity, given that they also differ with respect to independence-interdependence and analysis-holism (not to mention other socio-historical factors).

This study expands upon our previous research (Lenton, Bruder et al., 2013; Lenton, Slabu, et al., 2013) not only by taking a cross-cultural perspective, but also by including a

control condition ('yesterday'). In this way, we could determine if and how experiences of authenticity (or inauthenticity) differ from a typical day. Finally, we used LIWC to conduct exploratory analyses of the linguistic expressions of state authenticity and inauthenticity in order to assess whether there is cultural variation in their content and context.

METHOD

Participants

We recruited: (1) University students in the UK, Singapore, and China (the latter two via local contacts); (2) persons visiting websites that listed psychological studies; and (3) persons registered with Amazon's Mechanical Turk (MTurk), a global website that offers online tasks for pay (in our study: \$3-\$4, $n = 325$). In all, 977 participants from more than 60 countries responded to our request for a narrative description and completed at least some of the survey questions. We set a threshold of at least 100 participants for a country to be included in our analysis. Samples drawn from China, India, Singapore, and the US met this threshold.

We then excluded participants who indicated that they were resident in a country other than their country of origin for more than five years, because immersion into the host culture dilutes the original cultural socialization (Masgoret & Ward, 2005). In addition, we excluded responses of 85 participants, because they: (1) did not follow instructions regarding the writing task ($n = 72$; e.g., by writing only one or two words, by describing something unrelated to their assigned condition), (2) completed the survey more than once ($n = 8$; in which case we included their first attempt), or (3) wrote in indecipherable English ($n = 5$). The final sample consisted of 622 participants (388 women, 231 men, 3 unreported), with a mean age of 26.45 years ($SD = 8.79$). US participants numbered 207 ($M_{Age} = 28.58$, $SD_{Age} = 12.08$; $n_{Male} = 60$, $n_{Female} = 144$, $n_{Unreported} = 3$), China 178 ($M_{Age} = 23.72$, $SD_{Age} = 5.12$; $n_{Male} = 131$, $n_{Female} = 47$), India 127 ($M_{Age} = 28.09$, $SD_{Age} = 6.44$; $n_{Male} = 41$, $n_{Female} = 86$), and Singapore 110 ($M_{Age} = 24.94$, $SD_{Age} = 6.17$; $n_{Male} = 72$, $n_{Female} = 38$).

Materials and Procedure

Upon accessing the website, participants were randomly assigned to one of three versions of the questionnaire (in English): most me, least me, or control. First, participants

completed three individual difference measures (1 = *strongly disagree*, 7 = *strongly agree*): (1) the analysis-holism scale (AHS; Choi, Koo, Choi, 2007), (2) the self-construal scale (SCS; Singelis, 1994), and (3) the Authentic Personality Scale (APS; Wood et al., 2008). The order of the scales and the order of items within the scales were randomized for each participant.

The 24-item AHS ($\alpha = .69$) assesses holistic versus analytic thinking style. Holistic thinking emphasizes the big picture rather than a focal object (e.g., "It is more important to pay attention to the whole than its parts"); higher scores indicate greater holistic and lesser analytic thinking. The 24-item SCS assesses the extent to which people define the self in relation with or as separate from others. The scale has two orthogonal dimensions: interdependent self-construal ($\alpha = .73$; e.g., "It is important to me to respect decisions made by the group") and independent self-construal ($\alpha = .63$; e.g., "I enjoy being unique and different from others in many respects"). Although people vary within cultures on these dimensions (Markus & Kitayama, 1991), on average, Easterners are higher in interdependent than independent self-construal, whereas Westerners demonstrate the converse pattern (Singelis, 1994). To limit questionnaire length and thus reduce the likelihood of drop-out, we used the 12-item APS ($\alpha = .87$) scale to assess dispositional authenticity. This scale comprises three facets: authentic living (e.g., "I am true to myself in most situations"), self-alignment (e.g., "I don't know how I really feel inside," reverse coded), and rejecting external influence (e.g., "I usually do what other people tell me to do," reverse coded). In addition, we maintain that Kernis and Goldman's (2006) four-component model can readily be converted into two of Wood et al.'s (2008) components. "Authentic living" (Wood et al.) reflects a merger of Kernis and Goldman's "behavioral" and "relational" authenticity, as authentic living represents the degree to which one is acting in alignment with one's personal goals, preferences, and beliefs, in the presence of others or alone. "Self-alienation" (Wood et al.) is a combination of "unbiased processing" and "awareness" (Kernis & Goldman), given that knowing oneself implies conscious awareness of one's feelings and self-aspects, be that either flattering or unflattering. Further, Kernis and Goldman have argued that behavioral and relationship authenticity depend upon awareness, a premise that is similar to Wood et al.'s

contention that authentic living is a state characterized by the relative absence of self-alienation. Wood et al.'s model adds to Kernis and Goldman's model the idea that social influence is likely to have implications for authenticity. Table 1 presents the correlations among the individual difference measures.

Next, participants in the most-me condition described an event during which "you felt most like your true or real self," whereas those in the least-me condition described an event during which "you felt least like your true or real self" (Lenton, Bruder, et al., 2013). Participants in the control condition described what they did 'yesterday' and, thus, served as a baseline measure for how people feel on a typical day.

Participants then rated that event (1 = *strongly disagree*, 7 = *strongly agree*) using adapted versions of the following scales, administered in random order: (1) International short Positive Affect and Negative Affect Schedule (I-PANAS; Thompson, 2007), (2) Rosenberg Self-Esteem Scale (Rosenberg, 1965), (3) private and public self-consciousness scales (Fenigstein, Scheier, & Buss, 1975). Participants rated the relevant psychological state (e.g., state self-esteem) in that situation rather than rating their standing on that construct in general (e.g., trait self-esteem). Participants also rated the experience on the extent to which it aligned with their ideal self (10 attributes from the Self-Attributes Questionnaire; Pelham & Swann, 1989) and on the extent to which each of 10 psychological needs were satisfied (one item per need; Sheldon, Elliot, Kim, & Kasser, 2001; we used the item that loaded highest on the relevant needs). All measures were internally consistent ($\alpha s > .82$). Finally, participants provided demographic information: gender, age, country of birth, and (if different) country of residence as well as duration of residency.

RESULTS

Data Analytic Notes

We identified and excluded outliers to prevent a small number of cases from having undue influence on results; for each hypothesis tested below, we report the number of cases excluded (if any). The criteria for exclusion were as follows: studentized residuals $> |3|$, and/or unusually high values of Cook's D (given the mean value), and/or leverage values $> .20$ (Judd & McClelland, 1989). Overall, the conclusions we draw from the results remain

largely the same, whether we exclude the outliers or not. Where this is not true, however, we describe in a footnote how the results differ save for the exploratory narrative content analyses (as we restricted by space limitations).

We conducted between-subjects Analyses of Variance (ANOVAs) to test the main hypotheses. For analyses of the individual difference measures (e.g., interdependence, trait authenticity), the ANOVA comprised one between-subjects factor (culture: US vs. China vs. India vs. Singapore). For the analyses of the experiential content and ratings thereof, the ANOVAs comprised two between-subjects factors: 3 (narrative type: least-me vs. most-me vs. control) x 4 (culture: US vs. China vs. India vs. Singapore). We used three orthogonal planned contrasts to examine the effects of culture: (1) US (+3) versus India (-1), China (-1), and Singapore (-1); (2) India (+2) versus China (-1) and Singapore (-1; US assigned 0); and (3) China (+1) versus Singapore (-1; others assigned 0). To compare the focal experiences of authenticity and inauthenticity with a typical day (yesterday), we used the following non-orthogonal a priori contrasts: (1) least-me (-1) versus control (+1; most-me assigned 0); (2) most-me (-1) versus control (+1; least-me assigned 0). Below, we report the results of the omnibus tests and of the planned contrasts.

Validation of Cross-Cultural Differences

We first examined cross-cultural differences in AHS and independent versus interdependent self-construal by conducting separate ANOVAs for each measure. Table 2 provides the descriptive statistics.

The omnibus effect of culture on AHS was small, but significant (three outliers removed), $F(3, 615) = 3.83, p = .01, \eta^2 = .018$. The first a priori contrast revealed that US participants were less likely than Easterners (combined) to reason holistically, $t(615) = -2.85, p = .004$. The second contrast produced a marginal effect, such that Indian participants self-reported thinking somewhat less holistically compared to Chinese and Singaporean

participants (combined), $t(615) = -1.78, p = .075$.¹ The third contrast showed that Chinese and Singaporean participants did not differ, $t(615) = -.59, p = .557$.

The omnibus test of culture on independent self-construal was significant (two outliers removed), $F(3, 615) = 9.94, p = .001, \eta^2 = .046$. There was no significant difference between US participants and Easterners, $t(615) = 1.23, p = .219$. Indian participants reported a higher independent self-construal than Chinese and Singaporean participants (combined), $t(615) = 4.19, p = .001$. Chinese participants reported significantly lower levels of independence compared to Singaporean ones, $t(615) = -2.50, p = .001$.

The omnibus test of culture on interdependent self-construal was also significant (six outliers removed), $F(3, 612) = 31.19, p = .001, \eta^2 = .133$. US participants reported having a significantly less interdependent self-construal than Easterners, $t(612) = -8.34, p = .001$. Indian participants also reported a stronger interdependent self-construal than Chinese and Singaporean ones (combined), $t(612) = 5.005, p = .001$. There was no significant difference between Chinese and Singaporean participants, $t(612) = .453, p = .651$.

Trait Authenticity

We first examined measurement equivalence of the three-factor trait authenticity scale across cultures. In accordance with Byrne (2010), we did so using a series of nested models (computations with AMOS 21.0). First, we created a configural model with no equality constraint imposed by analyzing the four cultural groups in a single multi-group model. We then tested for metric invariance (i.e., constraining item loadings to be equal across culture groups), followed by scalar invariance (i.e., constraining intercepts across cultural groups). We used the root mean square error of approximation (RMSEA) as the main criterion to evaluate model fit (Hu & Bentler, 1995). RMSEA is superior to the chi-square statistic due to its correction for sample size. We examined additional goodness-of-fit indices: the comparative fit index (CFI) and the Tucker–Lewis index (TLI). We considered fit adequate if RMSEA values were $< .08$, and CFI and TLI values were $> .90$. We considered fit very good

¹ When we included outliers in the analysis, the second contrast was not significant. That is, Indian participants did not differ in holistic thinking compared to Chinese and Singaporean ones (combined), $t(618) = -1.45, p = .148$.

when a RMSEA value was $< .05$, and CFI and TLI values were $> .95$ (Hu & Bentler, 1999). We concluded measurement invariance when we observed changes in RMSEA of .015 or less in a more stringent constrained model (Chen, 2007), and when additional fit indices reached a generally good overall fit (Little, 1997).

The first two models that tested for configural and metric equivalence resulted in good fit indices (configural: RMSEA = .03, CFI = .936, TLI = .952; metric: RMSEA = .029, CFI = .962, TLI = .956). Next, the model testing for full scalar equivalence also reached an acceptable fit (RMSEA = .041, CFI = .911, TLI = .912). From configural to metric and then scalar invariance, RMSEA changed from 0.03 to 0.029 and then 0.041², respectively. The changes in RMSEA of the nested models were all smaller than the recommended maximum difference of 0.015 (Chen, 2007). The support for scalar invariance allows us to conclude that participants from different cultural groups defined trait authenticity similarly. In all, sufficient invariance exists to permit the examination of between-country differences (Steenkamp & Baumgartner, 1998).

The omnibus effect of culture on overall trait authenticity was significant, $F(3, 618) = 15.09, p = .001, \eta^2 = .068$ (Table 2). The a priori contrasts indicated that US participants reported higher authenticity than Eastern ones, $t(618) = 5.93, p = .001$, and that Indian participants reported greater authenticity than the combined Chinese and Singaporean samples, $t(618) = 2.40, p = .017$. We found no difference in trait authenticity between Chinese and Singaporean participants, $t(612) = -.915, p = .361$.

We also investigated cross-cultural differences for each authenticity subscale separately. The omnibus effects were significant for all three: (1) authentic living (five outliers removed), $F(3, 613) = 11.02, p = .001, \eta^2 = .051$; (2) rejecting external influence, $F(3, 618) = 12.96, p = .001, \eta^2 = .059$; and (3) self-alignment (one outlier removed), $F(3, 617) = 10.38, p = .001, \eta^2 = .048$. US participants reported higher authentic living, $t(613) = 3.57, p = .001$, rejection of external influence, $t(618) = 5.23, p = .001$, and self-alignment,

² When testing for a stricter level of equivalence, fit indices are expected to worsen (i.e., lower CFI and TLI, higher RMSEA). However, changes in the other direction (i.e., higher CFI and TLI, lower RMSEA) are possible because most fit indices are a function of degrees of freedom (Cheung & Rensvold, 2002).

$t(617) = 5.31, p = .001$, compared to Easterners. Indian participants reported more authentic living, $t(613) = 2.91, p = .004$, and rejection of external influence, $t(618) = 3.29, p = .001$, than the combined Chinese and Singaporean samples. Finally, Singaporean participants indicated more authentic living compared to Chinese ones, $t(613) = -2.55, p = .011$.

Mediation

To examine whether the observed cross-cultural differences in overall trait authenticity could be explained by the AHS or self-construal, we conducted bootstrap analyses (*Mediate* SPSS macro; Preacher & Hayes, 2008) with the confidence interval set to 95% ($\alpha = .05$) and the sample size set to 5000 (Hayes, 2009). A confidence interval that does not contain zero is evidence of mediation (Hayes, 2009).

The indirect effect of the first contrast (US vs. Easterners) on trait authenticity was significant through each AHS and interdependent, but not independent, self-construal: (1) AHS: $a \times b = -.006, SE_{a \times b} = .003, 95\% \text{ CI } [-.013, -.0008]$; (2) independent self-construal: $a \times b = .009, SE_{a \times b} = .008, 95\% \text{ CI } [-.006, .024]$; (3) interdependent self-construal: $a \times b = .036, SE_{a \times b} = .008, 95\% \text{ CI } [.022, .052]$. The indirect effect of the second contrast (India vs. China + Singapore) on trait authenticity was significant through independent and interdependent self-construal, but not AHS: (1) AHS: $a \times b = -.006, SE_{a \times b} = .005, 95\% \text{ CI } [-.017, .003]$, (2) independent self-construal: $a \times b = .051, SE_{a \times b} = .013, 95\% \text{ CI } [.028, .077]$; (3) interdependent self-construal: $a \times b = -.036, SE_{a \times b} = .01, 95\% \text{ CI } [-.058, -.018]$. As the third contrast (China vs. Singapore) was not significant in the first place, we did not assess its mediators. Controlling for the mediators, the omnibus direct effect of culture on overall trait authenticity remained significant, $F(3, 614) = 8.11, p = .001$.

In summary, US participants evinced higher levels of trait authenticity than Easterners, in part, because they self-reported reasoning less holistically and possessing relatively less interdependent self-construal. Indian participants also reported higher levels of trait authenticity than Chinese and Singaporean samples (combined), in part, because they self-report possessing relatively more independent and interdependent self-construal.

State Authenticity

Narrative Content Analysis

We examined the content of the narratives using LIWC, which calculated the percentage of words in a text for each of 29 dimensions of interest in our study: (1) personal pronouns (i.e., first person singular, first person plural); (2) psychological constructs, including the (subordinate) categories of social processes (e.g., family, friends), affective processes (e.g., anxiety, anger) and cognitive processes (e.g., insight, causation); and (3) personal concerns constructs (i.e., work, achievement). We display the results in Table 4.³ Although we focus our discussion below on the omnibus effect of narrative type (using Bonferroni-corrected post-hoc tests, given the exploratory nature of the LIWC analyses), we describe in Table 5 where Culture significantly moderated the effect of Narrative Type (only six out of the 29 LIWC dimensions; all else, $F_s < 1.96$, $p_s > .363$).

Compared to control narratives, narratives in both experimental conditions (least- and most-me) contained substantially more first-person singular pronouns, but fewer first-person plural pronouns (Table 4). Words related to humans or to social processes were used more often in the experimental narratives (vs. control), whereas family-related words were used more often in control narratives (vs. experimental). The experimental narratives (vs. control) were also higher in affect-related words, positive and negative emotion words, and words conveying anger, sadness, and anxiety (the latter only among least-me narratives). The significant Narrative \times Culture interaction here indicated that least-me narratives contained significantly more negative emotions than control narratives, but more so for the Indian sample than the US and Chinese samples.

With respect to cognitive processes, again, least-me and most-me (vs. control) narratives showed effects in the same direction, incorporating a significantly higher proportion of cognitive process-related words such as insight, causation, discrepancy, tentativeness, certainty, inhibition, and exclusiveness (but not inclusiveness). The significant Narrative \times Country interaction here revealed that the Chinese sample (vs. the other countries) were even more likely to mention insight-related words in their most-me than control narratives. As for personal concerns, most-me and least-me narratives were both less

³ Retention of outliers in the LIWC analyses led to virtually identical conclusions.

likely than control narratives to mention work-, leisure-, home-, and money-related words. The significant Narrative \times Culture interaction showed that the US sample were even more likely to mention home-related words in control than in most-me narratives.

Although the experimental narratives were remarkably similar to one another in how they differed from control, the results manifested points of distinction: Most-me (but not least-me) narratives contained significantly more achievement-related and death-related words compared to control.

Experiential Ratings

We examined whether most-me and least-me experiences differed from "yesterday" (i.e., the control condition) in terms of mood (PA and NA), need satisfaction, state self-esteem, self-consciousness (public and private), and overlap with the ideal-self. Further, we examined whether the size of any condition differences was moderated by culture. There were significant main effects of Culture for each dependent variable below (marginal for self-esteem); we report the outcome of the culture contrasts in Table 6, but do not discuss them further. In Table 6, we provide descriptive statistics for the main effects of interest (Narrative type), and Figures 1-7 show the forms each Narrative type \times Culture interaction took.

PA. The omnibus effect of Narrative type was significant (four outliers removed), $F(2, 606) = 71.89, p = .001, \eta^2 = .192$. Planned contrasts indicated that participants' positive affect in the least-me condition was significantly lower, $t(606) = 6.83, p = .001$, whereas participants' positive affect in the most-me condition was significantly higher, $t(606) = 6.09, p = .001$, than that of participants in the control condition. That is, across cultures, authenticity was associated with more and inauthenticity with less positive affect than in a typical day. The Narrative type \times Culture interaction was also significant, $F(6, 606) = 2.88, p = .009, \eta^2 = .028$. As Figure 1 illustrates, both contrasts (most-me vs. control, least-me vs. control) were significant for the US and Singaporean samples. For Chinese and Indian samples, only the comparison between least-me and control condition was significant.⁴

⁴ When we included outliers in the analysis, the contrast comparing most-me vs. control was significant for all cultures: US ($t[204] = 5.04, p = .001$), India ($t[124] = 2.56, p = .012$), China ($t[175] = 2.07, p = .04$), Singapore ($t[107] = 2.17, p = .032$). The second contrast comparing least-me vs. control was also significant for all

NA. The omnibus effect of Narrative type was significant, $F(2, 609) = 60.37, p = .001, \eta^2 = .165$. Planned contrasts indicated that participants' negative affect in the least-me condition was significantly higher than control, $t(609) = -10.29, p = .001$, whereas participants' negative affect in the most-me condition did not differ from control, $t(609) = .665, p = .477$. Across cultures, inauthenticity involved more negative affect than in a typical day, but the negative affect associated with authenticity was of a typical level. The Narrative Type \times Culture interaction was also significant, $F(6, 609) = 3.54, p = .002, \eta^2 = .034$. As Figure 2 illustrates, both contrasts were significant for Indian samples, whereas for US, Chinese, and Singaporean samples, only the comparison between least-me and control was significant.

Need satisfaction. The omnibus effect of Narrative type was significant (one outlier removed), $F(2, 609) = 98.75, p = .001, \eta^2 = .245$. Participants in the least-me condition felt that their needs were less satisfied than control, $t(609) = 11.85, p = .001$, whereas participants in the most-me condition felt that their needs were more satisfied than control, $t(609) = 3.30, p = .001$. Thus, across cultures, authenticity was associated with more and inauthenticity with less general need satisfaction than a typical day. The Narrative Type \times Culture interaction was also significant, $F(6, 609) = 4.31, p = .001, \eta^2 = .041$. As Figure 3 illustrates, whereas the comparison between least-me and control was significant for all cultures, the contrast comparing most-me to control was only significant for China.

Self-esteem. The omnibus effect of Narrative type was significant (three outliers removed), $F(2, 607) = 68.30, p = .001, \eta^2 = .184$. Participants' self-esteem in the least-me condition was significantly less, $t(607) = 8.40, p = .001$, whereas participants' self-esteem in the most-me condition was significantly more, $t(607) = 4.25, p = .001$, than that of control. Thus, across cultures, authenticity was associated with higher and inauthenticity with lower self-esteem than a typical day. The Narrative Type \times Culture interaction was also significant, $F(6, 607) = 3.52, p = .002, \eta^2 = .034$. As Figure 4 illustrates, both contrasts were significant

cultures: US ($t[204] = -4.41, p = .001$), India ($t[124] = -2.25, p = .026$), China ($t[175] = -1.99, p = .048$), Singapore ($t[107] = -3.80, p = .001$).

for US, Chinese, and Singaporean participants, but only the least-me contrast was significant for Indian ones.

Public self-conscious. The omnibus effect of Narrative type was significant, $F(2, 610) = 45.45, p = .001, \eta^2 = .130$. Participants in the least-me condition were higher in public self-consciousness than control, $t(610) = -7.56, p = .001$, whereas participants in the most-me condition were lower in public self-consciousness than control, $t(610) = -2.12, p = .034$. That is, on average, authenticity was associated with less and inauthenticity with more public self-consciousness than a typical day. The Narrative Type \times Culture interaction was again significant, $F(6, 610) = 3.90, p = .001, \eta^2 = .037$. As Figure 5 depicts, the comparison between least-me and control was significant for US, Indian, and Singaporean participants, whereas the comparison between most-me and control was significant for Chinese participants.

Private self-conscious. The omnibus effect of Narrative type was significant (one outlier removed), $F(2, 609) = 4.19, p = .016, \eta^2 = .014$. Participants in the least-me and control conditions did not differ in private self-consciousness, $t(609) = -.339, p = .735$, whereas participants in the most-me condition felt more privately self-conscious than control, $t(609) = 2.89, p = .004$. Narrative Type \times Culture interaction was also significant, $F(6, 609) = 3.25, p = .004, \eta^2 = .031$. As Figure 6 depicts, however, the only significant comparison was between most-me and control condition for Indian participants. That is, only for these participants did authenticity involve more private self-consciousness than a typical day.

Ideal self overlap. The omnibus effect of Narrative type was significant (six outliers removed), $F(2, 604) = 12.57, p = .001, \eta^2 = .040$. Participants in the least-me condition felt less overlap, $t(604) = -3.50, p = .001$, whereas participants in the most-me condition felt more overlap between their ideal and true selves than those in control, $t(604) = 2.19, p = .029$. That is, across cultures, both authenticity and inauthenticity were different from the typical day in terms of their implications for the ideal self. The Narrative Type \times Culture interaction was also significant, $F(6, 604) = 2.24, p = .038, \eta^2 = .022$.⁵ As Figure 7 depicts, the only

⁵ When we included outliers in the analysis, the most-me (vs. control) condition displayed marginally more overlap between the ideal and true self, $t(619) = 1.78, p = .075$. The Narrative Type \times Culture interaction was

significant comparison was between least-me and control for US and Singaporean participants.

GENERAL DISCUSSION

Psychological universals are a foundational postulate of psychology, yet many of its areas have recognized the critical role of culture in shaping psychological processes (Markus & Kitayama, 2010). Despite their seemingly contradictory nature, the presence of cultural differences need not rule out cross-cultural universals, as these forces can act at different levels of psychological responses. For example, people across many cultures engage in self-enhancement (Alicke & Sedikides, 2009; Gaertner, Sedikides, & Cai, 2012; Hepper, Sedikides, & Cai, 2013), but it is just that they self-enhance in distinct ways (e.g., individualists via agency, collectivists via communion; Cai et al., 2011; Sedikides, Gaertner, & Toguchi, 2003; Sedikides, Gaertner, & Vevea, 2005). That is, there are many roads to Rome. Likewise, in this study we sought to determine whether authenticity is something that people of different cultures can experience or, instead, whether it is a Western concept for Western individuals. To address this issue, we compared both the trait and state authenticity of members of a relatively analytic, independent culture (the US) with three cultures that possess a relatively more holistic thinking style and interdependent self-construal (China, India, and Singapore). The results revealed both predictable differences and striking similarities.

Culture and Trait Authenticity

With respect to dispositional authenticity, the US sample self-reported the highest level, followed by the Indian sample, and then Chinese and Singaporean samples together. In fact, the US participants featured higher scores on all trait authenticity subscales compared to Easterners. Our results extend those of Robinson and colleagues (2012), given that we focused on several Eastern cultures simultaneously and examined directly the role of culture in dispositional authenticity. The mediation analysis supported Hypothesis 1, namely that

also marginal, $F(6,610) = 1.88, p = .082$. Finally, the contrast comparing least-me vs. control was significant not only for the US sample ($t[204] = 3.45, p = .001$), but also for the India ($t[124] = 2.15, p = .034$) and Singapore ($t[107] = 2.04, p = .044$) samples.

differences between Westerners and Easterners in trait authenticity are, in part, due to the different norms endorsed by these cultures. Specifically, compared to Easterners, US participants were (on average) less interdependent and more analytical in thinking style, characteristics associated with higher trait authenticity. Furthermore, the trait authenticity difference between Indian and Chinese/Singaporean participants were, in part, due to Indian participants being relatively more independent and interdependent than Chinese and Singaporean participants.

Let us explicate these findings. When authenticity is operationalized in terms of values consistent with independence, as in Wood et al.'s (2008) measure, then people from these cultures (e.g., Western) will appear to be more authentic than people from cultures that value interdependence (e.g., Eastern). However, as research by English and Chen (2011) suggests, if authenticity were defined in a manner more relevant to Easterners (e.g., as consistency within relationships over time, or acceptance of others' influence), Easterners would instead appear more authentic than Westerners. This has implications for how researchers may link their formulation of authenticity to participants' values. If measures of trait authenticity operationalize this construct in a way that conflicts with an individual's personal values, then, even if a person is living in accordance with those values, that person may be deemed 'inauthentic.' In that respect, although tested on an ethnically diverse sample (i.e., Asian, Black, and White participants), the Wood et al. (2008) trait authenticity scale may be unable to capture this nuance and hence assess adequately trait authenticity across cultures. Future research could examine whether the Authenticity Inventory (Kernis & Goldman, 2006), which comprises facets such as relational orientation and unbiased processing, depicts Westerners as more dispositionally authentic than Easterners.

Cultural differences in self-construal and thinking style did not fully explain the difference in dispositional authenticity between participants from the US and the other cultures, or that between Indian on the one hand and Chinese and Singaporean participants on the other (combined). Future research might look for other cultural variables that could account for these result patterns. For example, cultural differences in the tendency to self-enhance with respect to agency versus communion (Gebauer, Wagner, Sedikides, &

Neberich, 2013) could explain some of the difference in trait authenticity between US and Eastern participants; that is, the responses of the US participants may have reflected, in part, their greater social desirability concerns regarding authenticity.

Culture and State Authenticity

This study was the first to explore cultural variability in the content and phenomenological experience of authenticity and inauthenticity narratives and, further, to compare these experiences to a typical day. We begin by addressing the findings concerning the content of state authenticity across cultures.

The LIWC analysis of emotional language use was consistent with previous findings (Rice & Pasupathi, 2010). Most-me (vs. control) narratives were characterized by more positive emotion words and fewer negative emotion words, whereas least-me (vs. control) narratives contained more negative than positive words. Further attesting to the idea that experiences of authenticity and inauthenticity are not everyday occurrences for people across the world, most-me and least-me narratives did not differ from each other in many other respects, whereas both differed from the control condition. For example, the most-me and least-me narratives involved more cognitive and more social processes than did the control narratives. Additionally, the two experimental narratives had higher first-person singular pronoun use and lower first-person plural pronoun use than the typical day, which points to an increased focus on the self as an individuated entity (Baddeley, Daniel, & Pennebaker, 2011). Notably, culture moderated relatively few of the LIWC themes (6 of 29, i.e., negative emotions, insight, work, achievement, home, and religion), most of which fell under the 'personal concerns' category. Thus, the content of authenticity and inauthenticity experiences are different from the average day in similar ways across cultures, but the settings (context) in which authenticity and inauthenticity occurs are different across cultures. For example, the achievement context was conducive to authenticity for Indian participants, was conducive to inauthenticity for Chinese participants, and was equally likely to produce authenticity as inauthenticity for both US and Singaporean participants. Overall, the LIWC results suggest that authenticity and inauthenticity experiences: (1) are not psychological opposites of one another, and (2) are similar in content, though perhaps not context, across cultures.

Further attesting to the cross-cultural similarity in how authenticity and inauthenticity are experienced are the findings concerning the subjective ratings of state authenticity. Consistent with previous studies of Western participants (Heppner et al, 2008; Lenton, Bruder, et al., 2013; Turner & Billings, 1991), US participants rated most-me (vs. control) experiences as involving relatively positive affect and the least-me experiences as involving relatively negative affect. Indian, Chinese and Singaporean participants viewed experiences of inauthenticity similarly: less PA and more NA than a typical day. Singaporean participants, like those from the US, rated experiences of authenticity as involving more PA and less NA than a typical day. This was not true for Indian and Chinese participants, though. For both groups, experiences of authenticity contained no more positive affect than the typical day. Furthermore, Indian participants rated experiences of authenticity as involving more (not less) negative affect than the typical day.

We reasoned that, if cross-cultural differences were to occur, affect would be one area that they might be found (Hypothesis 2b). Indeed, positive emotions are more desirable in Western than Eastern cultures (Eid & Diener, 2001; Miyamoto, Uchida, & Ellsworth, 2010) and people from Eastern cultures are more likely to balance positive and negative emotions (Bagozzi et al., 1999; Miyamoto & Riff, 2011). In addition, when the situation is predominantly positive, Easterners experience both positive and negative emotions, because their cultural script is grounded in dialectical thinking (i.e., they seek a middle-way), whereas Westerners feel only positive emotions due to a cultural script reinforcing positive outcomes for the self. On the other hand, when the situation is predominantly negative, cultural differences in affect are reduced (Leu et al., 2010; Miyamoto & Ma, 2011). Supporting this contention, we found no cultural differences in affective ratings of the least-me experiences: all four cultures associated inauthenticity with higher NA and lower PA than the typical day. The affective ratings of the most-me experiences, in contrast, differed across cultures. Viewed in another way (Figures 1 and 2), the affective difference between a typical day and the experience of (in)authenticity was generally larger (more extreme) for US than Eastern participants (i.e., the difference between the black and white bars within each culture).

Notably, Singaporean participants evinced a similar pattern of results to that of US participants. We elaborate on this below.

On the whole, although our analyses of the experiential ratings uncovered Narrative \times Culture interactions for all seven dependent variables, we maintain that the cultural similarities in the experience authenticity and inauthenticity outweigh the cultural differences. Stated otherwise, most of the cross-cultural differences in the experience of authenticity and inauthenticity (vs. control) were matters of magnitude rather than direction. For example, and consistent with Hypothesis 2a, inauthenticity was characterized by lesser need satisfaction than a typical day across all cultures. Authenticity narratives, in turn, were associated with higher need satisfaction than an average day for all cultures, but this contrast was significant for China only. These findings are also partially consistent with the contentions of SDT (Deci & Ryan, 2000; Oishi & Diener, 2001) and sociometer theory (Leary, 2003) that need dissatisfaction may elicit inauthenticity. They do not support the converse side of the argument, however, namely that need satisfaction facilitates authenticity, as need satisfaction was not reliably stronger than that of a typical day for all except Chinese participants. Moreover, the findings corroborate those of recent experiments in which we primed need satisfaction and dissatisfaction (e.g., of competence, relatedness; Lenton, Slabu, et al., 2013). Both manipulations made participants feel *less* authentic, depending on whether their needs were usually met; for example, need satisfaction priming made those whose needs were usually unsatisfied feel less authentic. In all, authenticity and inauthenticity are not two sides of the same coin, given that they may have independent triggers.

Similar to the findings concerning need satisfaction, most-me (vs. control) narratives were associated with higher self-esteem, whereas least-me (vs. control) narratives was associated with lower self-esteem. The two contrasts were significant for all cultures, except for the most-me versus control conditions among Indian participants. Still, the mean difference was in the same direction: higher self-esteem in most-me experiences. Although cross-cultural work has pointed to variability in trait self-esteem across-cultures (Schmitt & Allik, 2005), as well as to different sources of self-esteem for independent and interdependent cultures (Kwan, Kuang, & Hui, 2009), consistent with Hypothesis 2a, these results indicate

that, regardless of one's cultural background, authentic situations elevate self-esteem, whereas inauthentic experiences undermine it.

With respect to public self-consciousness, Hypothesis 2b stated that US participants would report the greatest difference between experiences of authenticity and inauthenticity. The rationale for this hypothesis was based on Easterners having a chronic tendency to perceive themselves from the perspective of others (Heine et al., 2008) and on the strong empirical relation between public self-consciousness and inauthenticity among Westerners (Harter, 2002; Lenton, Bruder et al., 2013). The results were only partially consistent with this hypothesis. All cultures except China perceived experiences of inauthenticity to contain more public self-consciousness than the average day. Chinese participants also were the only ones to associate authenticity with a distinct *lack* of public self-consciousness. At the same time, however, the magnitude of the difference in public self-consciousness between experiences of authenticity and inauthenticity was largest for US participants, followed closely by Singaporean participants. Indian participants manifested a (non-significant) tendency to associate experiences of authenticity with stronger public self-consciousness. Overall, these findings indicate that cultures are more similar than different in regards to the link between authenticity and public self-consciousness.

The findings regarding private self-consciousness stand in stark contrast, as only one comparison was significant: Among the Indian sample, most-me narratives contained more private self-consciousness than a typical day. The other cultures showed non-significant trends in the same direction. Also non-significant was the comparison between the least-me and control conditions. That is, inauthenticity narratives bore no association to private self-consciousness (or a lack thereof) for all cultures but India. These findings corroborate our recent results (Lenton, Bruder, et al., 2013) that authentic and inauthentic experiences are weakly strongly related to private self-awareness. The standard error bars in Figure 6 indicate, however, a great deal of variability within each culture with respect to private self-consciousness. This may reflect the intricate relation between private self-consciousness and authenticity. For example, some forms of authenticity may involve quiet self-reflection and

others may involve a distinct lack of self-awareness (Lenton, Slabu, et al., 2013). If so, the average relation between authenticity and private self-consciousness would be null.

The US and Singaporean samples reported significantly lower ideal-self overlap in the least-me (vs. control) condition. Specifically, and in partial support of Hypothesis 2b, these two cultures alone reported feeling significantly less ideal when they were not being real. Authenticity was not associated with a distinctly greater ideal-self overlap (vs. a typical day) for any culture. Per the theorizing above, these findings may be due, in part, to Easterners' greater comfort with self-discrepancies (Kitayama et al., 1995) and Westerner's idealization of the real self (Knobe, 2005). At the same time, however, that Westerners did not perceive experiences of authenticity as overlapping more with the ideal self than the average day. It is likely, then, that being unreal is particularly un-ideal. Singaporean participants evinced a similar pattern to that of US participants, not only with respect to the effects of narrative type on ideal-self overlap, but also with respect to positive and negative affect, self-esteem, need dissatisfaction, public, and private self-consciousness. Despite Singapore being categorized and confirmed by our results as an interdependent culture, these two samples may possess common beliefs about authenticity and its attainment, perhaps because of the greater language overlap between Western and Singaporean culture (English). Of the Eastern cultures, Singapore was the least interdependent but the most holistic one, suggesting that the independence-interdependence continuum may play a larger role in how authenticity is experienced than the analysis-holism continuum.

Limitations

The findings have potential limitations. *First*, there may be cultural differences in how people respond to questionnaire items, no matter the item content (Fisher 2004; Fisher & Milfont, 2010). For example, Eastern participants use the midpoint in rating scales more than US participants, whereas the latter use more extreme values (Chen, Lee, & Stevenson, 1995). Thus, the cross-cultural differences in our measures could be due to differential response biases. We investigated this possibility, and found that the pattern of results was largely the same when cultural response biases were controlled (Fisher & Milfont, 2010). Additionally, we observed cross-cultural measurement equivalence of the trait authenticity scale, which led

us to conclude that differential responding to scale items was likely be due to cultural influences. *Second*, our samples may have differed in ways other than culture. That is, the samples likely varied in terms of level of education and socioeconomic status. That being said, most of our US, Chinese, and Singaporean samples were recruited from local Universities and thus were likely similar to one another, at least in terms of educational attainment. *Third*, due to the retrospective nature of the narrative methodology, recall bias may be a limitation. For example, people's enduring goals or motives shape their autobiographical memories (McLean, Pasupathi & Pals, 2007; Sedikides & Green, 2009; Sutin & Robins, 2005). People may thus rely upon reconstructive memory processes and, in so doing, exaggerate attributes of the 'most-me' or 'least-me' stories in ways relevant to their self goals. Alternative in situ designs are needed to strengthen confidence in these results. *Fourth*, the results were correlational. Thus it remains unclear whether, for example, self-esteem precipitates, coincides with, or follows from experiences of authenticity and, further, whether this ordering of events is the same across cultures. The *fifth* and final limitation also pertains to conclusions that can be drawn from our results. We delineated the relation of state (in)authenticity with such subjective experiences as mood, needs, ideal self, state self-esteem, situational public self-consciousness, and situational private self-consciousness as a function of cultural context. We showed that, across cultures, inauthenticity is associated with similar subjective experiences, whereas authenticity is associated with somewhat distinct subjective experiences. Due to design constraints, we cannot conclude that any of these subjective experiences is a precursor of state authenticity. Future investigations would need to examine whether state authenticity is similarly multifaceted and whether authentic living, self-alienation, and accepting external influence relate to one another at the state level in the same way as they do at the trait level. In that regard, an experience sampling technique (Lenton, Slabu, & Sedikides, 2013) would be useful to test whether Wood and colleague's (2008) model is a valid conceptualization of state authenticity and whether trait-state consistency facilitates state authenticity across cultures.

CONCLUSION

The present research advances understanding of culture's role in both trait and state authenticity. Different cultural self-construals and thinking styles, in part, accounted for US participants reporting higher average levels of trait authenticity than participants from Eastern cultures such as India, China, and Singapore. Analyses of the content and phenomenological experience of state authenticity revealed that both authenticity and inauthenticity are atypical experiences, as they differed in many respects from an average day (i.e., 'yesterday'). The subjective ratings further showed that cross-cultural similarities in the correlates of state *inauthenticity* were especially striking. Across the cultural samples, *inauthentic* experiences evoked less positive mood, more negative mood, less self-esteem, less need-dissatisfaction, and greater public self-consciousness (apart from China) than a typical day. Authentic experiences showed more variability across cultures: For none of the seven dependent variables did the contrast comparing most-me to control narratives show the same pattern of results across all four cultures. Thus, whereas state *inauthenticity* feels the same across cultures, authenticity feels different. At least some of that cultural variability in the subjective experience of authenticity, however, can be explained by other cross-cultural differences identified in earlier research. In conclusion, authenticity – and its counterpart, *inauthenticity* – are experiences with which people across different cultures can identify, even if the paths to these experiences are somewhat distinct.

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Table 1

Simple Correlations between the Analysis-Holism Scale (AHS; Choi, Koo, Choi, 2007), the Self-Constraint Scale (SCS; Singelis, 1994), and the Authentic Personality Scale (APS; Wood et al., 2008).

	SCS - independent	SCS- interdependent	APS
AHS	.11*	.31**	.06
APS	.38**	-.20**	-
SCS- interdependent	.08	-	-

*Note: df for correlations were 622. ** $p < .01$. * $p < .05$.*

Table 2

Mean (SE) Analysis-Holism, Self-Construal, Trait Authenticity by Culture.

	US	India	China	Singapore	Significant Contrasts
Analysis-Holism	4.87 (.03)	4.93 (.04)	5.01 (.04)	5.04 (.05)	1, 2
Independent self-construal	4.82 (.05)	4.96 (.06)	4.53 (.05)	4.75 (.07)	2, 3
Interdependent self-construal	4.65 (.05)	5.37 (.06)	5.03 (.05)	4.99 (.06)	1, 2
Overall Trait Authenticity	5.19 (.07)	4.87 (.09)	4.57 (.07)	4.67 (.09)	1, 2
Authentic Living	5.82 (.06)	5.74 (.08)	5.31 (.07)	5.59 (.09)	1, 2, 3
Rejecting External Influence	4.49 (.09)	4.22 (.11)	3.85 (.10)	3.67 (.12)	1, 2
Self-Alignment	5.30 (.10)	4.67 (.13)	4.57 (.11)	4.75 (.13)	1

Note. Contrast 1 = US (+3) versus India (-1), China (-1), and Singapore (-1); Contrast 2 = US (0), India (+2) versus China (-1) and Singapore (-1) Contrast 3 = US (0), India (0), China (+1) versus Singapore (-1).

Table 3

Mediation results Concerning Culture's Effects on Trait Authenticity.

	Mediator	Effect of Contrast	Effect of Mediator
		on Mediator	on DV
		(path <i>a</i>)	(path <i>b</i>)
Contrast 1	Analysis-Holism	-.099 (.014)	.100 (.008)
	Independent self-construal	.065 (.107)	.371 (.001)
	Interdependent self-construal	-.294 (.001)	-.209 (.001)
Contrast 2	Analysis-Holism	-.056 (.163)	.110 (.004)
	Independent self-construal	.179 (.001)	.369 (.001)
	Interdependent self-construal	.172 (.001)	-.277 (.001)

Note. The parentheses following the standardized regression coefficients (Beta) indicate the significance level; *Contrast 1* = US (+3) versus India (-1), China (-1), and Singapore (-1);

Contrast 2 = US (0), India (+2) versus China (-1) and Singapore (-1).

Table 4

Mean (SE) LIWC Dimension by Narrative Type and by Culture.

Dimension	Least-me	Control	Most-me	US	India	China	Singapore
Personal Pronouns (0.64%)	15.57 (.37) _a	12.91 (.32) _b	15.70 (.35) _a	14.71 (.34) _{ab}	14.97 (.43) _{ab}	15.58 (.36) _a	13.65 (.46) _b
First person singular (0.80%)	12.95 (.36) _a	11.06 (.32) _b	12.86 (.35) _a	12.15 (.33) _a	12.18 (.43) _{ab}	13.41 (.36) _b	11.42 (.45) _a
First person plural (2.41%)	.53 (.09) _{ab}	.78 (.08) _a	.50 (.09) _b	.60 (.08) _a	.46 (.11) _a	.69 (.09) _a	.66 (.11) _a
Social Processes (0.80%)	9.62 (.40) _a	5.95 (.34) _b	9.54 (.38) _a	8.40 (.36) _a	8.21 (.46) _a	8.38 (.39) _a	8.49 (.49) _a
Family (2.89%)	.51 (.10) _a	.81 (.09) _a	.55 (.09) _a	.79 (.09) _a	.67 (.12) _{ab}	.38 (.10) _b	.65 (.12) _{ab}
Friends (1.93%)	.82 (.10) _a	.87 (.09) _a	.85 (.09) _a	.71 (.09) _a	.78 (.11) _a	.87 (.10) _a	1.02 (.12) _a
Humans (1.77%)	1.19 (.09) _a	.28 (.08) _b	.91 (.09) _a	.96 (.08) _a	.75 (.11) _a	.74 (.09) _a	.71 (.11) _a
Affective Processes (0.96%)	5.45 (.24) _a	2.50 (.21) _b	6.12 (.23) _a	4.39 (.22) _a	4.84 (.29) _a	5.38 (.24) _a	4.14 (.30) _b
Positive emotions (1.61%)	3.09 (.20) _a	1.94 (.17) _b	4.17 (.19) _c	3.14 (.18) _{ab}	3.01 (.23) _{ab}	3.34 (.20) _a	2.77 (.25) _a
Negative emotions (1.61%)	2.12 (.13) _a	.47 (.12) _b	1.55 (.13) _c	1.21 (.12) _a	1.72 (.15) _a	1.42 (.13) _a	1.17 (.17) _a
Anxiety (2.09%)	.38 (.04) _a	.10 (.04) _b	.17 (.04) _b	.28 (.04) _a	.23 (.05) _a	.15 (.04) _a	.22 (.05) _a
Anger (2.73%)	.42 (.05) _a	.05 (.04) _b	.25 (.04) _c	.24 (.04) _a	.35 (.05) _a	.21 (.05) _a	.16 (.06) _a
Sadness (2.25%)	.38 (.05) _a	.17 (.04) _b	.35 (.05) _a	.18 (.05) _a	.40 (.06) _b	.36 (.05) _{ab}	.25 (.06) _{ab}
Cognitive processes (.96%)	18.39 (.40) _a	11.79 (.35) _b	18.07 (.38) _a	17.25 (.36) _a	15.15 (.46) _b	16.13 (.40) _b	15.82 (.50) _b
Insight (1.45%)	3.25 (.14) _a	.56 (.12) _b	2.95 (.13) _a	2.34 (.13) _a	2.11 (.16) _a	2.50 (.14) _a	2.06 (.17) _a

Causation (1.77%)	1.37 (.10) _a	.60 (.08) _b	.89 (.09) _c	1.03 (.09) _a	.90 (.11) _a	1.04 (.10) _a	.84 (.12) _a
Discrepancy (0.80%)	1.28 (.10) _a	.29 (.09) _b	1.34 (.10) _a	.95 (.09) _a	1.04 (.12) _a	1.07 (.10) _a	.82 (.13) _a
Tentativeness (1.29%)	2.38 (.16) _a	1.34 (.14) _b	2.46 (.15) _a	2.15 (.14) _a	1.77 (.18) _a	2.19 (.16) _a	2.13 (.20) _a
Certainty (1.93%)	1.42 (.11) _a	.34 (.10) _b	1.46 (.10) _a	1.31 (.10) _a	.98 (.13) _{ab}	1.27 (.11) _a	.73 (.14) _b
Inhibition (2.57%)	.47 (.05) _a	.17 (.04) _b	.30 (.04) _b	.25 (.04) _a	.27 (.05) _a	.36 (.05) _a	.35 (.06) _a
Inclusive (1.61%)	5.13 (.26) _a	7.60 (.23) _b	5.97 (.25) _a	7.00 (.24) _a	6.00 (.31) _{ab}	5.32 (.26) _b	6.60 (.33) _a
Exclusive (1.45%)	2.86 (.15) _a	.63 (.13) _b	2.15 (.14) _c	1.95 (.14) _a	1.75 (.17) _a	1.93 (.15) _a	1.88 (.19) _a
Personal Concerns							
Work (0.80%)	3.48 (.29) _a	5.27 (.26) _b	3.02 (.28) _a	2.84 (.26) _a	4.25 (.34) _{bc}	4.91 (.29) _b	3.70 (.36) _{ac}
Achievement (0.96%)	1.62 (.14) _{ab}	1.28 (.13) _a	1.83 (.14) _b	1.47 (.13) _{ac}	1.94 (.17) _b	1.48 (.14) _c	1.43 (.18) _{abc}
Leisure (1.45%)	1.09 (.18) _a	3.34 (.16) _b	1.73 (.17) _c	2.25 (.16) _a	1.39 (.21) _b	2.26 (.18) _a	2.30 (.23) _a
Home (1.61%)	.52 (.12) _a	2.58 (.11) _b	.56 (.11) _a	1.66 (.11) _a	1.03 (.14) _b	1.15 (.12) _b	1.05 (.15) _b
Money (2.09%)	.28 (.08) _a	.81 (.07) _b	.46 (.07) _a	.41 (.07) _{ab}	.64 (.09) _{ab}	.33 (.07) _a	.69 (.09) _b
Religion (2.4%)	.08 (.04) _a	.19 (.03) _a	.18 (.04) _a	.15 (.03) _a	.18 (.04) _a	.14 (.04) _a	.14 (.05) _a
Death (1.13%)	.003 (.005) _{ab}	.001 (.004) _a	.013 (.004) _b	.014 (.004) _a	.008 (.006) _a	.001 (.005) _a	.001 (.006) _a

Note. The parentheses following category name indicate the percentage of participants excluded as outliers. Means within a row not sharing subscripts are significantly different at $p < .05$ per pairwise comparisons conducted with Bonferroni's correction for multiple comparisons.

Table 5

Mean (SE) LIWC Dimension for Significant Narrative Type x Culture Interactions.

Dimension	df	<i>F</i>	<i>p</i>	Partial η^2	US			India			China			Singapore		
					Least-me	Control	Most-me	Least-me	Control	Most-me	Least-me	Control	Most-me	Least-me	Control	Most-me
Negative emotions (1.61%)	600	2.54	.019	.025	2.12 _a (.20)	.44 _b (.20)	1.08 _b (.22)	2.97 _a (.30)	.32 _b (.25)	1.86 _c (.25)	1.95 _a (.26)	.54 _b (.20)	1.78 _a (.22)	1.43 _a (.29)	.59 _a (.26)	1.48 _a (.30)
Insight (1.45%)	601	2.35	.03	.023	3.4 _a (.21)	.41 _b (.21)	3.22 _a (.24)	3.30 _a (.32)	.29 _b (.26)	2.72 _a (.26)	3.02 _a (.27)	.82 _b (.21)	3.67 _a (.23)	3.28 _a (.31)	.70 _b (.28)	2.21 _a (.31)
Work (0.80%)	605	2.20	.041	.021	2.12 _a (.44)	4.20 _b (.44)	2.18 _a (.49)	3.60 _a (.66)	4.75 _a (.55)	4.38 _a (.55)	4.89 _{ab} (.56)	6.82 _a (.44)	3.02 _b (.49)	3.30 _a (.65)	5.31 _b (.59)	2.49 _a (.66)
Achievement (0.96%)	604	5.09	.001	.048	1.31 _a (.22)	1.46 _a (.22)	1.64 _a (.24)	1.24 _a (.32)	1.54 _a (.27)	3.04 _b (.27)	2.23 _a (.28)	.84 _b (.22)	1.38 _{ab} (.24)	1.71 _a (.32)	1.30 _a (.29)	1.28 _a (.33)
Home (1.61%)	600	3.15	.005	.031	.54 _a (.18)	3.55 _b (.18)	.88 _a (.20)	.45 _a (.27)	2.26 _b (.22)	.37 _a (.23)	.75 _a (.23)	2.24 _b (.18)	.45 _a (.20)	.34 _a (.26)	2.26 _b (.24)	.54 _a (.27)
Religion (2.41%)	595	2.62	.016	.026	.13 _{ab} (.06)	.06 _a (.06)	.25 _b (.06)	.03 _a (.08)	.36 _b (.07)	.15 _{ab} (.07)	.07 _a (.07)	.11 _a (.06)	.22 _a (.06)	.10 _a (.08)	.23 _a (.08)	.09 _a (.09)

Note. The parentheses following category name indicate the percentage of participants excluded as outliers. Means within a same row and the same country column that do not share subscripts are significantly different at $p < .05$ per pairwise comparisons conducted with Bonferroni's correction for multiple comparisons.

Table 6

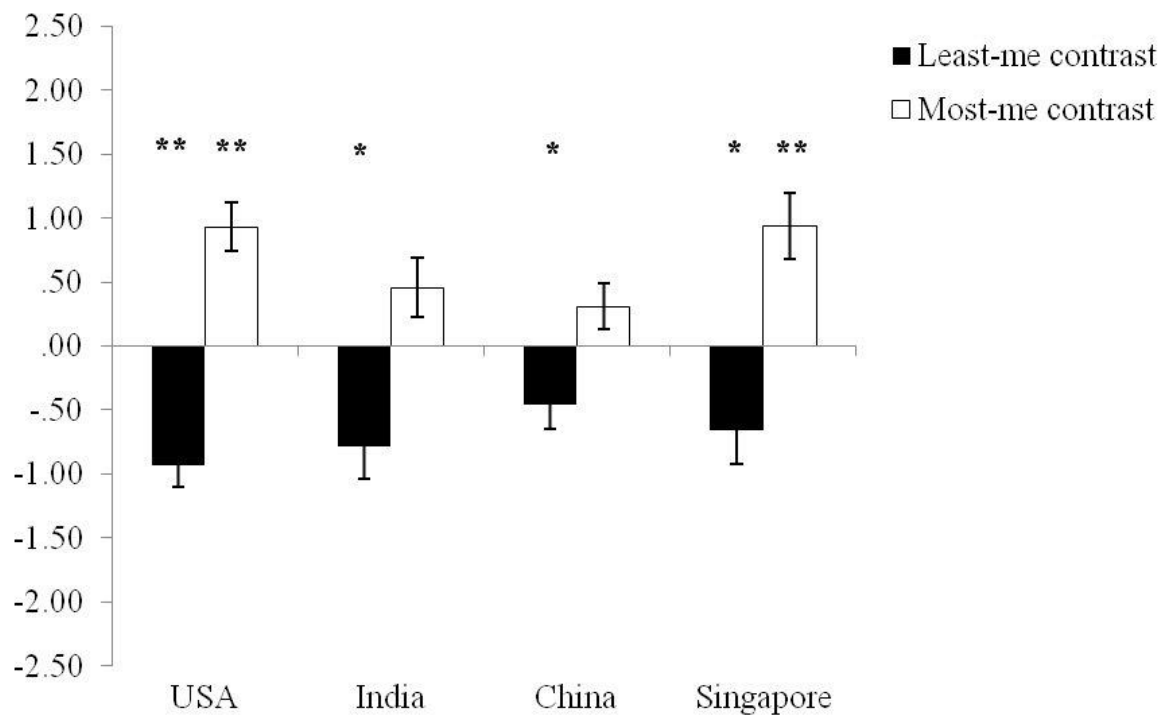
Mean (SE) PA, NA, Needs, SE, PriSC, PubSC, IdealSelf by Narrative Type and by Culture.

Experiential ratings	Least-me	Control	Most-me	Significant Contrasts	US	India	China	Singapore	Significant contrasts
PA	4.01 (.08)	4.72 (.07)	5.38 (.08)	1, 2	4.41 (.08)	5.25 (.10)	4.45 (.08)	4.70 (.10)	1, 2, 3
NA	4.06 (.10)	2.70 (.09)	2.80 (.10)	1	2.87 (.09)	3.63 (.12)	3.26 (.10)	2.98 (.13)	1, 2, 3
Needs	3.35 (.08)	4.54 (.07)	4.87 (.08)	1, 2	3.93 (.08)	4.74 (.10)	4.19 (.08)	4.14 (.10)	1, 2
SE	4.06 (.09)	5.01 (.08)	5.52 (.09)	1, 2	5.02 (.08)	4.81 (.11)	4.69 (.09)	4.93 (.11)	1
PubSC	4.91 (.13)	3.68 (.11)	3.36 (.12)	1, 2	3.63 (.11)	4.38 (.15)	3.97 (.12)	3.96 (.16)	1, 2
PriSC	4.50 (.09)	4.45 (.08)	4.78 (.09)	2	4.23 (.08)	5.03 (.11)	4.70 (.09)	4.37 (.12)	1, 2, 3
IdealSelf	4.65 (.08)	4.98 (.07)	5.20 (.08)	1, 2	4.95 (.07)	5.26 (.09)	4.76 (.08)	4.79 (.10)	2

Note. For the main effect of narrative type: *contrast 1* = least-me (-1), control (+1), most-me (0); *contrast 2* = control (-1), most-me (+1) least-me (0). For the main effect of culture: *Contrast 1* = US (+3) versus India (-1), China (-1), and Singapore (-1); *Contrast 2* = US (0), India (+2) versus China (-1) and Singapore (-1); *Contrast 3* = US (0), India (0), China (+1) versus Singapore (-1).

Figure 1

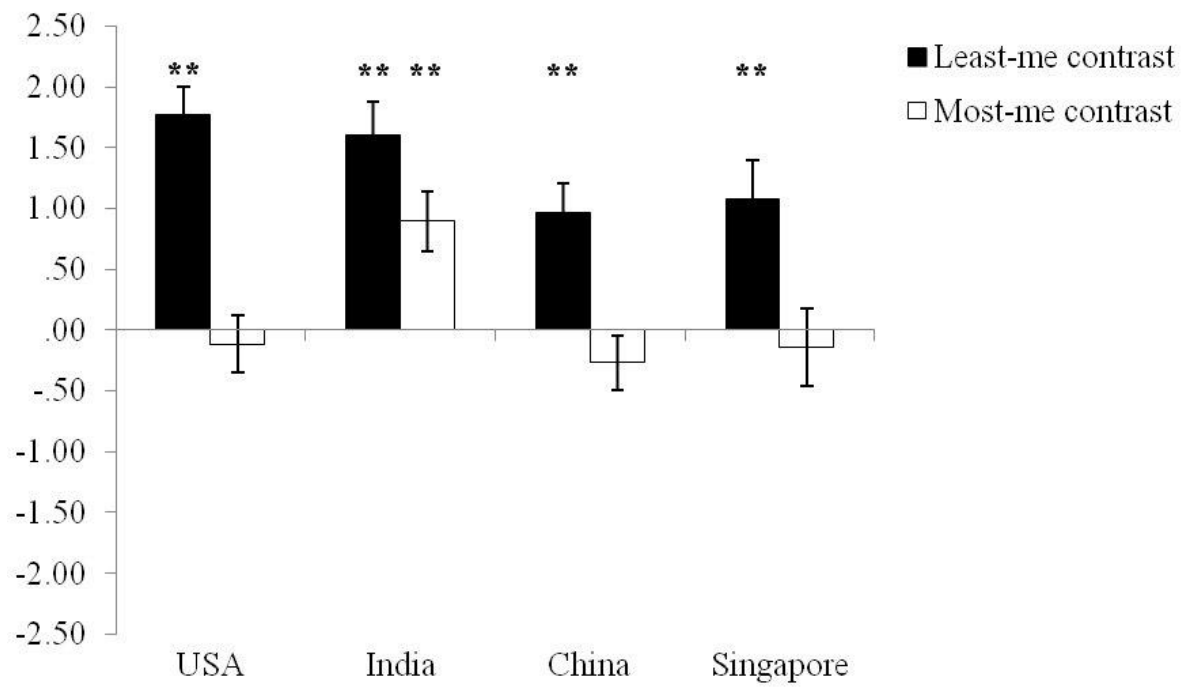
Narrative Type x Culture Interaction for PA.



Note. * is $p < .05$ and ** is $p < .001$

Figure 2

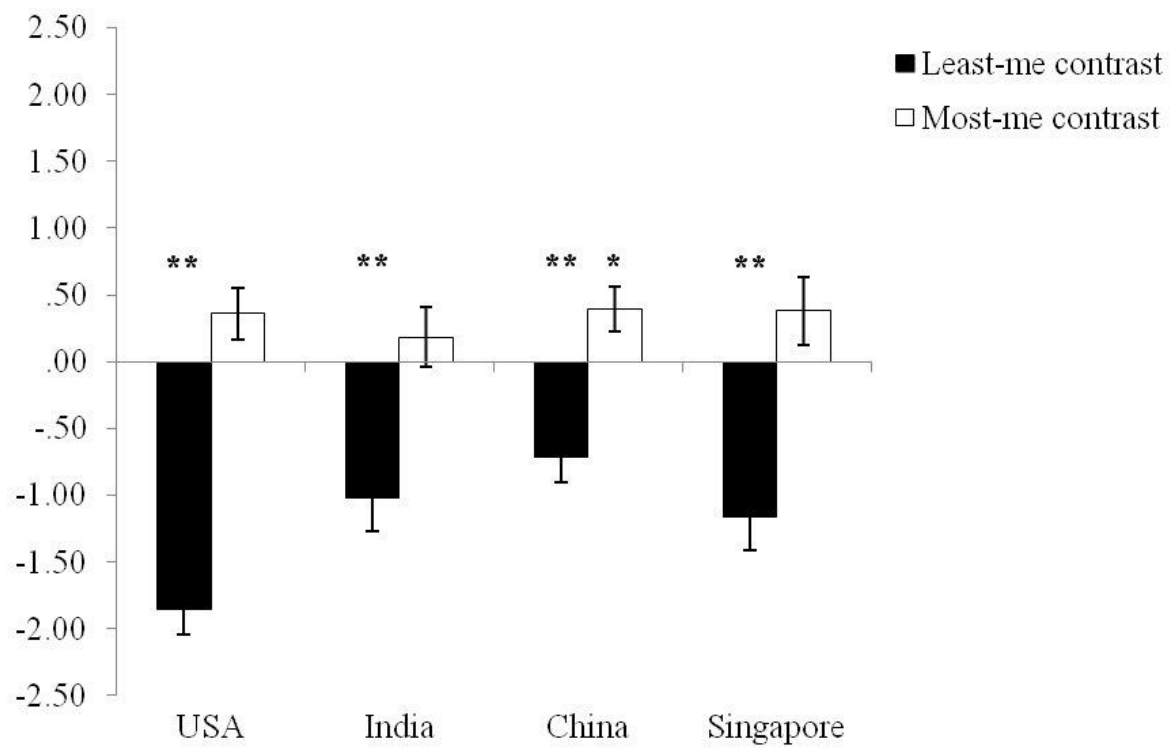
Narrative Type x Culture Interaction for NA.



Note. * is $p < .05$ and ** is $p < .001$

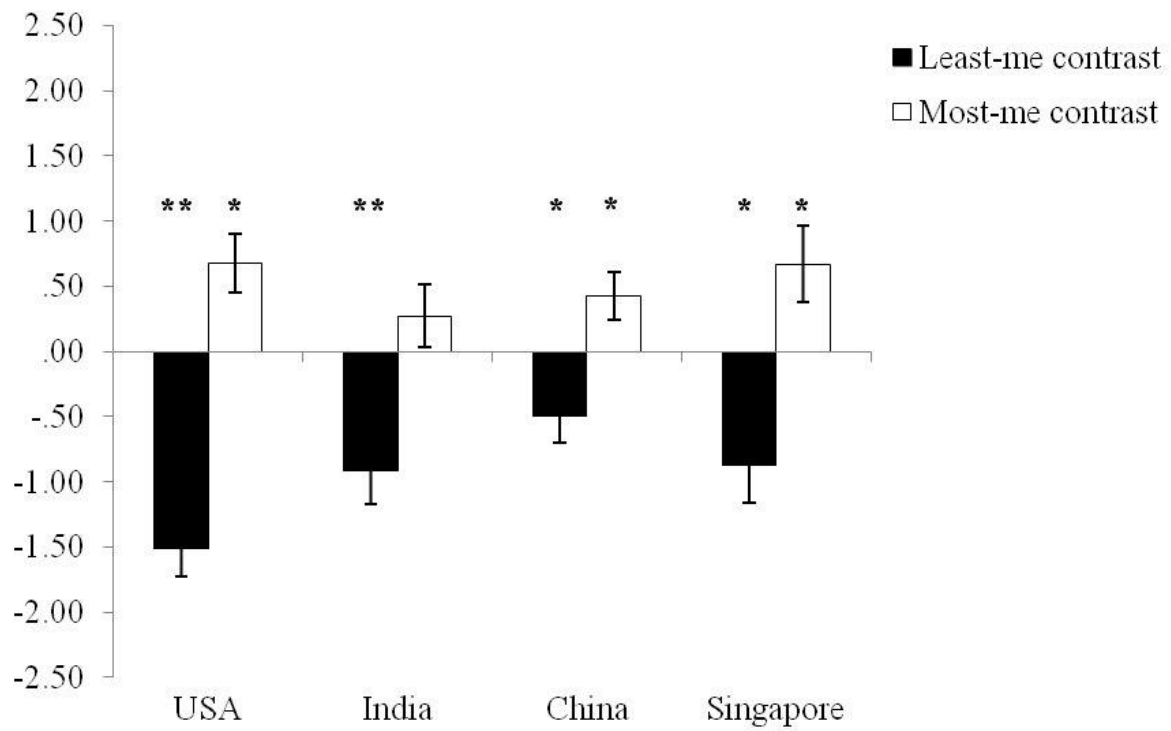
Figure 3

Narrative Type x Culture Interaction for Need Satisfaction.



Note. * is $p < .05$ and ** is $p < .001$

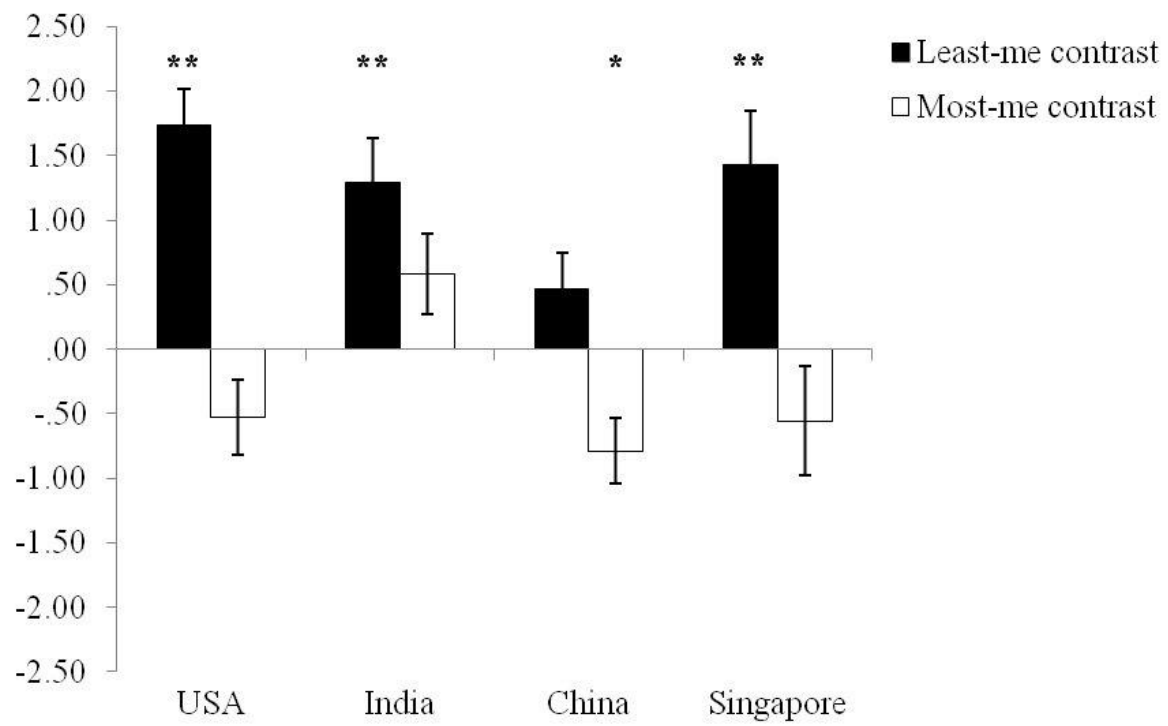
Figure 4

Narrative Type x Culture Interaction for Self-Esteem.

Note. * is $p < .05$ and ** is $p < .001$

Figure 5

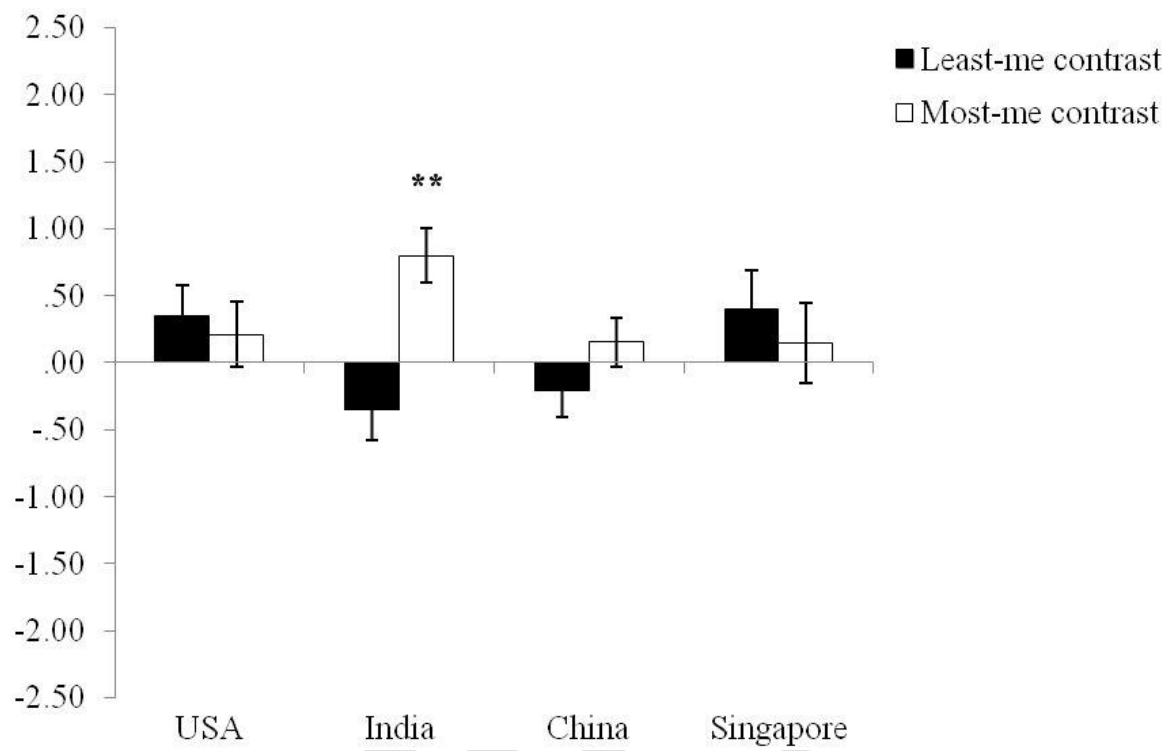
Narrative Type x Culture Interaction for Public Self-Consciousness.



Note. * is $p < .05$ and ** is $p < .001$

Figure 6

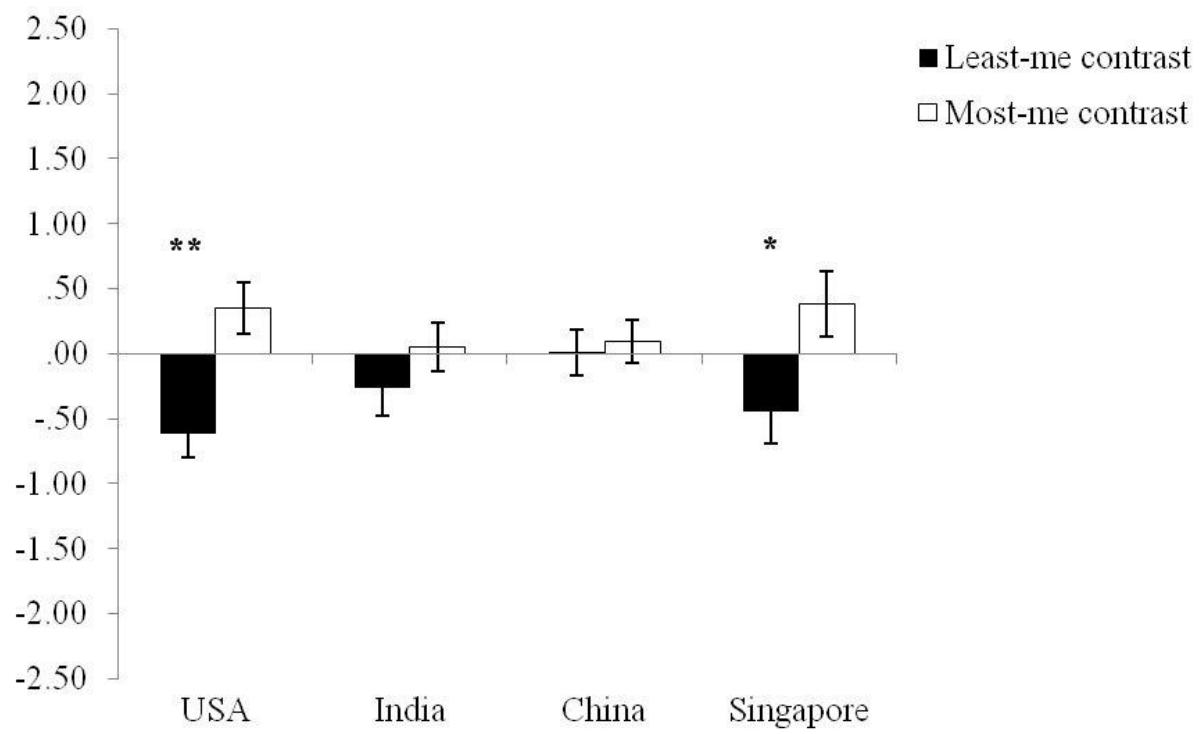
Narrative Type x Culture Interaction for Private Self-Consciousness.



Note. * is $p < .05$ and ** is $p < .001$

Figure 7

Narrative Type x Culture Interaction for Ideal-Self Overlap.



Note. * is $p < .05$ and ** is $p < .001$